## Course name: Design Studio IV

(Italian) Laboratorio di progettazione 4D School of Architecture, "Sapienza" - University of di Roma



This architectural design lab is planned to engage students in the design of a building of medium complexity to be located in an empty urban space of the city of Rome. The peculiarity of this Design studio is the relationship that is established between the program and the project area, and between the expected occupants and the set of theoretical and practical aspects of architectural and urban design that are addressed in this course. The program of the project lies in the large part on the concept of mixitè. Therefore IT proposes a combination of different activities organized from a strong idea of use, i.e. a driving force that motivates the project and its need in the contemporary city but also more specifically in the selected area. Each student will choose in fact a specific area for his/her project in a "Urban Voids" located in the north of Rome along the areas along Via Prenestina in the East Part of Rome close to close to GRA. In this area he/she will develop a program in close relationship with the teacher but also with the support of

promoter or virtual client. The course makes use of the Environmental Technology modules and Building systems to make the project bioclimatically aware.

The course will be organized in thematic cycles (the selection of the program, the spatial concepts, the spatial expressive and distribution organization). Each cycle will always provide one or more lessons, theoretical revisions and personal or collective presentations. The complex web of practices promoted by the course will be support by the Course web site, by Google maps to localize the urban voids, by a general blog and also by the individual blogs of each student. This system will create a dense network of shared experiences materials and knowledge. The course includes a pre-test in the second half of June and closes with a single exam session (see web page).

In short, the projects that are produced in this laboratory, which were widely published on paper (see Bibliography) and on the Web, are intended to promote the development of micro architectures that are based on six key features:

- The construction of a critical look on the periphery
- The creation of innovative programs to use based on the concept of "mixitè"
- Enhancement of areas abandoned or underused city
- The study of new approaches in terms of bioclimatic and environmental

- The use of information technology in the dissemination and co-responsibility of the project

- The activation of concrete relationships with potential project partners considered as indispensable actors in the social and economic context of the city

- The contribution to the professional role of the designer as the carrier of a role "Pro-Active" in contemporary society.

Of course, the strength of three hundred projects to date with this approach lies not in the individual aspects listed above, but in their intertwining synergy that is the peculiar characteristic of every effort in the specification of Architectural and Urban Design.

## Theoretical aspects

In teaching, we believe central planning effort to bridge the separation between the analytical phase (knowledge) and a synthetic phase (design). The risk is to have one hand sectorialisation of specialist contributions, almost to the same ineffectiveness of their development decisions, and the other an "aura" of the designing process. Aim of the course is on the contrary make the students aware of the tools, techniques, concepts and "tools of the trade" of the project. From this point of view, the course inscribes in the category of "instrumentality". An instrumentality that connects always the theoretical moment to the design tools to address the issues proposed.

The method of conducting the Laboratory is based on a teaching philosophy of dewyian origin whose base is the attempt does not sever the analysis phase (i.e. the transmission of a series of knowledge and issues related to the theme) from the phase of Synthesis (i.e. the development of the project). The method of hypothesis-synthesis allows the test of design decisions throughout the entire course period and throughout the entire design process. The collection of new informations (i.e. ex cathedra lectures, seminars, lectures, visits, etc.) are structured in thematic cycles to mature and deepen the design assumptions. The information thus create a moment of truth, a "test" for the design assumptions gradually formulated and require subsequent modifications and refinements of the project.

Derived from this framework, the course is divided into several thematic cycles. Each cycle consists of one or more ex-cathedra lectures, individual revisions, collective workshopd with presentations of project ideas. The fundamental cycles are the following:

- 1. The city and the urban voids
- 2. The setting (Module and environmental systems)
- 3. The program will use the concept of mixité and promoter
- 4. The layout of the volumes and the Checkerboard design

5. System technology and systems (Module and environmental systems) intro elements

- 6. The distribution system and the conquest of the center
- 7. The expressive and the five categories of vision
- 8. The Synthesis Project

## **Organizational aspects and Design modules**

The compulsory attendance by the students will be checked. The use of portable computer is considered particularly useful in this course. We recommend using the program Sketch up, which has a light version for free download http://it.sketchup.com. Creating an individual blog is required as a means of relationships with other students, and delivery interim presentation of the project. We recommend the creation through https://www.blogger.com/

Some concepts of Environmental Technology teaching and Building Systems are provided as an opportunity to intervene in the creative and design process of students, through notions of comfort and well-being within the built environment.

An overview of examples of buildings with energy-saving features, will provide some tools to recognize, analyze and to understand the solutions adopted in each building.

Also, depending on the needs of ongoing projects will be carried out in-depth on the issues of psycho acoustics and architectural acoustics.

Final Examination

Attendance is required and students have to prove to have passed all the eight cycles.

pre exam is June 23 2017 and Fional exams in a unique session the 17th e 18th of July 2017

The materials for the exam are:

1. A detailed portfolio that contains a summary of lectures, readings, studies and project ideas submitted in each Studio cycle.

2. A series of drawings, which will be detailed over the content, and that will synthesize, together with a model, with the proposed project.

3. A functioning blog which contains the products of the course and the basic rsearches conducted by each student.

The student will reveal a sufficient mastery of the material presented in the workshop and the preparation of a project proposal appropriate to the objectives.

## Bibliography

The more specific literature d will be provided together with the unfolding of the teaching. The following volumes are aids and supports to effective development of the design themes of the course

\* Urban Green Line. Progetti sistemici per una infrastruttura ecologica a Roma, Lulu.com 2012

"Tevere cavo una infrastruttura di nuova generazione per Roma tra passato e futuro" a cura di Antonino Saggio, Gaetano de Francesco, Itools-Lulu.com 2016 in biblioteca,

libreri\* UrbanVoids, *UrbanVoids™ Strategie nuove partnership per progetti sostenibili nella città di Roma*, lulu com 2010

\* Antonino Saggio &Scanner@Nitro, *Roma a\_venire, progetti per una citta dell'informazione e della storia vita*, Aracne editori, Roma 2009 anche http://www.arc1.uniroma1.it/saggio/roma/

Antonino Saggio, Architettura e Modernità, Dal Bauhaus a la Rivoluzione Informatica, Carocci, Roma 2010

*"Urban Green Line" una infrastruttura ecologica a Roma tra passato e futuro. «L'Arca international» marzo 2012 also in english and in frenc*